

AMENDMENTS TO THE CLAIMS

1. (Original) A method for separating and purifying a nucleic acid, which comprises:

(1) adsorbing the nucleic acid to a nucleic acid adsorbing porous membrane by passing a sample solution containing the nucleic acid through the nucleic acid adsorbing porous membrane;

(2) washing the nucleic acid adsorbing porous membrane by passing a washing solution through the nucleic acid adsorbing porous membrane, while the nucleic acid is adsorbed to the nucleic acid adsorbing porous membrane; and

(3) desorbing the nucleic acid from the nucleic acid adsorbing porous membrane by passing a recovering solution through the nucleic acid adsorbing porous membrane,

wherein the nucleic acid adsorbing porous membrane is a porous membrane that has a contact angle of 60° or less after 17 m seconds of contact of the porous membrane with 3 µl of water dropped to the porous membrane.

2. (Original) The method for separating and purifying a nucleic acid according to claim 1,

wherein the porous membrane has a contact angle of 50° or less.

3. (Currently amended) The method for separating and purifying a nucleic acid according to claim 1 ~~or~~ 2,

wherein the nucleic acid adsorbing porous membrane is a porous membrane comprising an organic polymer to which the nucleic acid is adsorbed by a weak interaction involving substantially no ionic bond.

4. (Currently amended) The method for separating and purifying a nucleic acid according to ~~any of claims 1 to 3~~ claim 1,

wherein the nucleic acid adsorbing porous membrane is a porous membrane comprising an organic polymer having a hydroxyl group.

5. (Currently amended) The method for separating and purifying a nucleic acid according to ~~any of claims 1 to 4~~ claim 4,

wherein the nucleic acid adsorbing porous membrane is a porous membrane obtained by saponification of a mixture of acetyl celluloses different from each other in acetyl value.

6. (Currently amended) The method for separating and purifying a nucleic acid according to ~~any of claims 1 to 5~~ claim 1,

wherein the nucleic acid adsorbing porous membrane has a front surface and a back surface asymmetrical with each other.

7. (Original) The method for separating and purifying a nucleic acid according to claim 6,

the nucleic acid adsorbing porous membrane has a larger average pore size on the front surface than an average pore size on the back surface.

8. (Currently amended) The method for separating and purifying a nucleic acid according to ~~any of claims 1 to 7~~ claim 1,

wherein the sample solution containing a nucleic acid is a solution where a water-soluble organic solvent is added to a solution obtained by treating a cell or virus-containing analyte with a nucleic acid solubilizing reagent.

9. (Original) The method for separating and purifying a nucleic acid according to claim 8,

wherein the nucleic acid solubilizing reagent is a solution containing at least one of a chaotropic salt, a surface active agent, a proteolytic enzyme, an antifoaming agent and a reducing agent.

10. (Currently amended) The method for separating and purifying a nucleic acid according to claim 8 ~~or 9~~,

wherein the water-soluble organic solvent is at least one alcohol selected from methanol, ethanol, propanol and an isomer thereof, and butanol and an isomer thereof.

11. (Currently amended) The method for separating and purifying a nucleic acid according to ~~any of claims 1 to 10~~ claim 1,

wherein the washing solution is a solution containing at least one of methanol, ethanol, propanol and an isomer thereof, and butanol and an isomer thereof in a total amount of 20 to 100% by weight.

12. (Currently amended) The method for separating and purifying a nucleic acid according to ~~any of claims 1 to 11~~ claim 1,

wherein the recovering solution is a solution having a salt concentration of 0.5 M or less.

13. (Currently amended) The method for separating and purifying a nucleic acid according to ~~any of claims 1 to 12~~ claim 1, which uses a cartridge for separation and purification of nucleic acid,

wherein the cartridge for separation and purification of nucleic acid comprises:

a container having at least two openings; and

a nucleic acid adsorbing porous membrane being received in the container.

14. (Currently amended) The method for separating and purifying a nucleic acid according to ~~any of claims 1 to 13~~ claim 1,

wherein the sample solution containing a nucleic acid, the washing solution or the recovering solution is passed through the nucleic acid adsorbing porous membrane by using a pressure difference producing device.

15. (Currently amended) A device for carrying out a method for separating and purifying a nucleic acid according to ~~any of claims 1 to 14~~ claim 1.

16. (Currently amended) A reagent kit for carrying out a method for separating and purifying a nucleic acid according to ~~any of claims 1 to 14~~ claim 1.